

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1. (Original) A polypeptide comprising an amino acid sequence N1N2X1X2X3N3X4N4X5, wherein N1, N2, N3, and N4 are aromatic amino acids, and X1-X5 are any amino acids, and wherein the polypeptide binds specifically to a ChemerinR polypeptide.
2. (Original) A polypeptide of claim 1, wherein N1 is tyrosine, N2-N4 are phenylalanine.
3. (Original) A polypeptide of claim 1, wherein the amino acid sequence is YFX1X2X3FX4FX5, wherein X1-X5 are any amino acid.
4. (Original) A polypeptide according to claim 3, wherein X1 is proline, X2, X4, and X5 are selected from group consisting of glycine, alanine, valine, leucine, isoleucine, serine, and threonine, and X3 is either glutamine or asparagine.
5. (Original) A polypeptide of claim 1, wherein the amino acid sequence is YFPGQFAFS.
6. (Original) A polypeptide of claim 1, wherein the amino acid sequence is QRAGEDPHSFYFPGQFAFS.
7. (Original) A polypeptide comprising an amino acid sequence SEQ ID No. 73 (the 157 aa truncated sequence).
8. (Original) A polypeptide comprising an amino acid sequence SEQ ID No. 12 (the 143 aa truncated sequence, Prochemerin).
9. (Original) A polypeptide comprising an amino acid sequence SEQ ID No. 14 (the 137 aa truncated sequence, Chemerin).
10. (Original) The polypeptide in claim 1, wherein the polypeptide is labeled with a moiety selected from the group consisting of a radioisotope, a fluorophore, a quencher of fluorescence, an enzyme, an affinity tag, and an epitope tag.
11. (Original) A nucleic acid sequence encoding the amino acid sequence of claim 5.

12. (Original) A nucleic acid sequence encoding the amino acid sequence of claim 6.
13. (Original) A nucleic acid sequence encoding the amino acid sequence of claim 7.
14. (Original) A nucleic acid sequence encoding the amino acid sequence of claim 8.
15. (Original) A nucleic acid sequence encoding the amino acid sequence of claim 9.
16. (Original) An expression vector comprising the coding sequence in any one of claims 11-15.
17. (Original) An expression vector of claim 16, wherein the expressing vector is a plasmid DNA expression vector.
18. (Original) An expression vector of claim 16, wherein the expressing vector is an adenovirus vector comprising the coding sequence under the control of tissue specific, tumor selective promoter.
19. (Original) A transgenic animal transfected with an expression vector according to claim 16.
20. (Original) A composition comprising the polypeptide in any one of claims 1-10.
21. (Original) A composition comprising the nucleic acid sequence in any one of claims 11-15.
22. (Original) A therapeutic composition comprising the polypeptide in any one of claims 1-10.
23. (Original) A therapeutic composition comprising the nucleic acid sequence in any one of claims 11-15.
24. (Original) A method of inhibiting cell proliferation comprising administering to a cell the composition in any one of claims 20.
25. (Original) A method of inhibiting cell proliferation comprising administering to a cell the composition in any one of claims 21.

26. (Original) A method of inhibiting cell proliferation comprising administering to a cell the expression vector according to claim 16.
27. (Original) A method of treating a subject with a disease or disorder comprising administering to the subject a therapeutically effective amount of the composition according claim 22.
28. (Original) A method of treating a subject with a disease or disorder comprising administering to the subject a therapeutically effective amount of the composition according claim 23.
29. (Original) A method of treating a subject with a disease or disorder comprising administering to the subject the expression vector according to claim 16.
30. (Original) The method according to claim 27, wherein the method is *ex vivo* gene therapy.
31. (Original) The method according to claim 28, wherein the method is *ex vivo* gene therapy.
32. (Original) The method according to claim 27, wherein the method is *in vivo* gene therapy.
33. (Original) The method according to claim 28, wherein the method is *in vivo* gene therapy.
34. (Original) A method according to any one of claims 27-33, wherein the disease is selected from the group consisting of: neoplasms located in the: colon, abdomen, bone, breast, digestive system, liver, pancreas, peritoneum, endocrine glands (adrenal, parathyroid, pituitary, testicles, ovary, thymus, thyroid), eye, head and neck, nervous (central and peripheral), lymphatic system, pelvic, skin, soft tissue, spleen, thoracic, and urogenital, as well as hypergammaglobulinemia, lymphoproliferative diseases, disorders, and/or conditions, paraproteinemias, purpura, sarcoidosis, Sezary Syndrome, Waldenstrom's Macroglobulinemia, Gaucher's Disease, histiocytosis, and any other hyperproliferative disease.
35. (Original) An antibody that selectively binds to the polypeptide in claim 1.

36. (Original) The antibody of claim 35, wherein the antibody is an agonist of Proprechemerin, or Prechemerin, or Chemerin, or analogs or fragments thereof.
37. (Original) The antibody of claim 35, wherein the antibody is an antagonist of Proprechemerin, or Prechemerin, or Chemerin, or analogs or fragments thereof.
38. (Original) The antibody of claim 35, wherein the antibody inhibits the binding of Proprechemerin, Prechemerin, or Chemerin, or analogs or fragments thereof, to ChemerinR.
39. (Original) The antibody of claim 35, wherein the antibody is a monoclonal antibody.
40. (Original) The antibody of claim 35, wherein the antibody is a monoclonal antibody that binds to an epitope comprising FSKALPRS.
41. (Original) The antibody according to any one of claims 35, wherein the antibody is conjugated or coupled to a detectable label, a radioactive label, an enzyme, a fluorescent label, a luminescent label, a bioluminescent label, or a therapeutic agent.
42. (Original) The antibody of claim 41, wherein the therapeutic agent is an antimetabolite, an alkylating agent, an antibiotic, a growth factor, a cytokine, a cytotoxic agent, a toxin, or an anti-angiogenic agent.
43. (Previously Amended) A method of identifying an agent that modulates the interaction between a Chemerin polypeptide and a ChemerinR polypeptide, said method comprising:
  - (a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence [and]or absence of a candidate modulator under conditions permitting the binding of said Chemerin polypeptide to said ChemerinR polypeptide; and
  - (b) measuring the binding of said ChemerinR polypeptide to said Chemerin polypeptide, wherein a decrease in binding in the presence of said candidate modulator, relative to the binding in the absence of said candidate modulator, identifies said candidate modulator as an agent that modulates the function of ChemerinR polypeptide.

44. (Original) The method of claim 43, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6, and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

45. (Previously Amended) The method of claim 43, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6, and the Chemerin polypeptide sequence is the polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

46. (Previously Amended) A method of detecting the presence, in a sample, of an agent that modulates the interaction between a Chemerin polypeptide and a ChemerinR polypeptide in a sample, said method comprising:

(a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence or absence of said sample under conditions permitting the binding of said Chemerin polypeptide to said ChemerinR polypeptide; and

(b) measuring the binding of said ChemerinR polypeptide to said Chemerin polypeptide, wherein a decrease in binding in the presence of said sample, relative to the binding in the absence of said sample, indicates the presence, in said sample of an agent that modulates the function of ChemerinR polypeptide.

47. (Original) The method of claim 46, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

48. (Previously Amended) The method of claim 46, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

49. (Previously Amended) A method of identifying an agent that modulates the function of ChemerinR polypeptide, said method comprising:

(a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence or absence of a candidate modulator; and

(b) measuring a signaling activity of said ChemerinR polypeptide, wherein a change in the activity in the presence of said candidate modulator relative to the activity in the absence of said candidate modulator identifies said candidate modulator as an agent that modulates the function of chemerinR polypeptide.

50. (Original) The method of claim 49, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6, and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

51. (Previously Amended) The method of claim 49, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6, and the Chemerin polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

52. (Previously Amended) A method of identifying an agent that modulates the function of ChemerinR polypeptide, said method comprising:

- (a) contacting a ChemerinR polypeptide with a candidate modulator;
- (b) measuring a signaling activity of said ChemerinR polypeptide in the presence of said candidate modulator; and
- (c) comparing said activity measured in the presence of said candidate modulator to said activity measured in a reaction in which said ChemerinR polypeptide is contacted with a Chemerin polypeptide, wherein a difference in said activities is indicative of said candidate modulator being an agent that modulates the function of ChemerinR.

53. (Original) The method of claim 52, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

54. (Previously Amended) The method of claim 52, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

55. (Previously Amended) A method of detecting the presence, in a sample, of an agent that modulates the function of ChemerinR polypeptide, said method comprising:

(a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence or absence of a candidate modulator;

(b) measuring a signaling activity of said ChemerinR polypeptide in the presence or absence of said sample; and

(c) comparing the amount of said activity measured in a reaction containing ChemerinR polypeptide and Chemerin polypeptide without said sample to the amount of said activity measured in a reaction containing ChemerinR polypeptide, Chemerin polypeptide, and said sample, wherein a change in said activity in the presence of said sample relative to the activity in the absence of said sample indicates the presence, in said sample, of an agent that modulates the function of ChemerinR polypeptide.

56. (Original) The method of claim 55, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

57. (Previously Amended) The method of claim 55, wherein the ChemerinR polypeptide sequence is SEQ ID No: 2, or 4, or 6 and the Chemerin polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

58. (Previously Amended) A method of detecting the presence, in a sample, of an agent that modulates the function of ChemerinR, said method comprising:

(a) contacting a ChemerinR polypeptide with said sample;

(b) measuring a signaling activity of said ChemerinR polypeptide in the presence of said sample; and

(c) comparing said activity measured in the presence of said sample to said activity measured in reaction in which said ChemerinR polypeptide is contacted with a Chemerin

polypeptide, wherein a difference in said activities is indicative of said sample as containing an agent that modulates the function of ChemerinR polypeptide.

59. (Original) The method of claim 58, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6 and the Chemerin polypeptide sequence is the polypeptide sequence in claim 1.

60. (Previously Amended) The method of claim 58, wherein the ChemerinR polypeptide sequence is SEQ ID No. 2, or 4, or 6 and the Chemerin polypeptide sequence is SEQ ID No. 14 (Chemerin) or SEQ ID No. 73.

Claims 61-63 (Previously Cancelled).

64. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said Chemerin polypeptide is detectably labeled.

65. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR signaling, said method comprising:

- (a) contacting a tissue sample with an antibody specific for a Chemerin polypeptide;
- (b) detecting binding of said antibody to said tissue sample; and
- (c) comparing the binding detected in step (b) with a standard, wherein a difference in binding relative said standard is diagnostic of a disease or disorder characterized dysregulation of ChemerinR, wherein said Chemerin polypeptide is detectably labeled with a moiety selected from the group consisting of a radioisotope, a fluorophore, a quencher of fluorescence, an enzyme, an affinity tag, and an epitope tag.

66. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said contacting is performed in or on a cell expressing said ChemerinR polypeptide.

67. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said contacting is performed in or on synthetic liposomes.



68. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said contacting is performed in or on virus-induced budding membranes containing a ChemerinR polypeptide.

69. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said method is performed using a membrane fraction from cells expressing said ChemerinR polypeptide.

70. (Previously Added) The method of either of claims 43 or 46 wherein said measuring is performed using a method selected from label displacement, surface plasmon resonance, fluorescence resonance energy transfer, fluorescence quenching, and fluorescence polarization.

71. (Previously Added) The method of any one of claims 43, 46, 49, 52, 55 and 58 wherein said agent is selected from the group consisting of a peptide, a polypeptide, an antibody or antigen-binding fragment thereof, a lipid, a carbohydrate, a nucleic acid, and a small organic molecule.

72. (Previously Added) The method of any one of claims 49, 52, 55 and 58 wherein said step of measuring a signaling activity of said ChemerinR polypeptide comprises detecting a change in the level of a second messenger.

73. (Previously Added) The method of either of claims 49, 52, 55 and 58 wherein the step of measuring a signaling activity comprises measurement of guanine nucleotide binding or exchange, adenylate cyclase activity, cAMP, Protein Kinase C activity, phosphatidylinositol breakdown, diacylglycerol, inositol triphosphate, intracellular calcium, arachinoid acid, MAP kinase activity, tyrosine kinase activity, or reporter gene expression.

74. (Previously Added) The method of claim 73 wherein said measuring a signaling activity comprises using an aequorin-based assay.

75. (Previously Added) A method of modulating the activity of a ChemerinR polypeptide in a cell, said method comprising the step of delivering to said cell an agent that modulates the activity of a ChemerinR polypeptide, such that the activity of ChemerinR is modulated.

76. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR signaling, said method comprising :

- a) contacting a tissue sample with an antibody specific for a ChemerinR polypeptide;
- b) detecting binding of said antibody to said tissue sample; and
- c) comparing the binding detected in step (b) with a standard, wherein a difference in binding relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR.

77. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR signaling, said method comprising:

- a) contacting a tissue sample with an antibody specific for a Chemerin polypeptide;
- b) detecting binding of said antibody to said tissue sample; and
- c) comparing the binding detected in step (b) with a standard, wherein a difference in binding relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR.

78. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR signaling, said method comprising :

- a) contacting a tissue sample with an antibody specific for a ChemerinR polypeptide and an antibody specific for a Chemerin polypeptide;
- b) detecting binding of said antibodies to said tissue sample; and
- c) comparing the binding detected in step (b) with a standard, wherein a difference in the binding of either antibody or both, relative to said standard, is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR polypeptide.

79. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said method comprising:

- a) isolating nucleic acid from a tissue sample;
- b) amplifying a ChemerinR polynucleotide, using said nucleic acid as a template; and
- c) comparing the amount of amplified ChemerinR polynucleotide produced in step (b) with a standard, wherein a difference in said amount of amplified ChemerinR polynucleotide relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR polypeptide.

80. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said method comprising :

- a) isolating nucleic acid from a tissue sample;
- b) amplifying a ChemerinR polynucleotide, using said nucleic acid as a template; and
- c) comparing the sequence of said amplified ChemerinR polynucleotide produced in step (b) with a standard, wherein a difference in said sequence, relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR polypeptide.

81. (Previously Added) The method of claim 80, wherein said standard is SEQ ID NO: 1.

82. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said method comprising :

- a) isolating nucleic acid from a tissue sample;
- b) amplifying a Chemerin polynucleotide, using said nucleic acid as a template; and
- c) comparing the amount of amplified Chemerin polynucleotide produced in step (b) with a standard, wherein a difference in said amount of amplified Chemerin polynucleotide relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR polypeptide.

83. (Previously Added) A method of diagnosing a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said method comprising :

- a) isolating nucleic acid from a tissue sample;
- b) amplifying a Chemerin polynucleotide, using said nucleic acid as a template; and
- c) comparing the sequence of said amplified Chemerin polynucleotide produced in step (b) with a standard, wherein a difference in said sequence, relative to said standard is diagnostic of a disease or disorder characterized by dysregulation of ChemerinR.

84. (Previously Added) The method of claim 80 or claim 83, wherein the step of comparing the sequence comprises minisequencing.

85. (Previously Added) The method of claim 83, wherein said standard is SEQ ID NO: 7.

86. (Previously Added) The method of claim 79 or claim 82, wherein said comparing the amount is performed on a microarray.

87. (Previously Added) The method of claim 80 or claim 83, wherein said comparing the sequence is performed on a microarray.

88. (Previously Added) The method of claim 52 or 58, wherein said difference in said activities is a 10% increase or decrease of an activity induced by said Chemerin polypeptide.

89. (Previously Added) The method of claim 52 or 58, wherein said difference in said activities is a 50% increase or decrease of an activity induced by said Chemerin polypeptide.

90. (Previously Added) A composition comprising an isolated ChemerinR polypeptide and an isolated Chemerin polypeptide.

91. (Previously Added) An antibody specific for a ChemerinR polypeptide.

92. (Previously Added) An antibody specific for a Chemerin polypeptide.

93. (Previously Added) A kit for screening for agents that modulate the signaling activity of ChemerinR polypeptide, said kit comprising an isolated ChemerinR polypeptide and packaging materials therefor.

94. (Previously Added) The kit of claim 90, further comprising a Chemerin polypeptide.

95. (Previously Added) A kit for screening for agents that modulate the signaling activity of ChemerinR polypeptide, said kit comprising an isolated polynucleotide encoding a ChemR23 polypeptide and packaging materials therefor.

96. (Previously Added) The kit of claim 95, further comprising an isolated polynucleotide encoding a ChemerinR polypeptide.

97. (Previously Added) A kit for screening for agents that modulate the signaling activity of ChemerinR, said kit comprising a cell transformed with a polynucleotide encoding a ChemerinR polypeptide and packaging materials therefor.

98. (Previously Added) A kit for the diagnosis of a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said kit comprising an isolated ChemerinR polypeptide and packaging materials therefor.

99. (Previously Added) The kit of claim 98, further comprising a Chemerin polypeptide.

100. (Previously Added) A kit for the diagnosis of a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said kit comprising an isolated polynucleotide encoding a ChemerinR polypeptide and packaging materials therefor.

101. (Previously Added) The kit of claim 100, further comprising an isolated polynucleotide encoding a Chemerin polypeptide.

102. (Previously Added) A kit for the diagnosis of a disease or disorder characterized by dysregulation of ChemerinR polypeptide signaling, said kit comprising a cell transformed with a polynucleotide encoding a ChemerinR polypeptide and packaging materials therefor.

103. (Previously Added) A non-human mammal having a homozygous null mutation in the gene encoding ChemerinR polypeptide.

104. (Previously Added) A non-human mammal transgenic for a ChemerinR polynucleotide.

105. (Previously Added) A non-human mammal transgenic for a Chemerin polynucleotide.

106. (Previously Added) The antibody of claim 91, wherein said ChemerinR polypeptide comprises a sequence of SEQ ID NO. 2, 4, or 6.

107. (Previously Added) The antibody of claim 91, wherein said antibody is a monoclonal antibody.

108. (Previously Added) A method of inhibiting ChemerinR activation, said method comprising:

(a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence or absence of an antibody specific for said ChemerinR polypeptide; and

(b) measuring the binding of said Chemerin polypeptide to said ChemerinR polypeptide, wherein a decrease in said binding in the presence of said antibody, relative to said binding in the absence of said antibody, is indicative of said antibody inhibiting ChemerinR activation.

109. (Previously Added) The method of claim 108, wherein said ChemerinR polypeptide comprises a sequence of SEQ ID NO. 2, 4, or 6.

110. (Previously Added) The method of claim 108, wherein said antibody is a monoclonal antibody.

111. (Previously Added) A method of inhibiting ChemerinR activation, said method comprising:

(a) contacting a ChemerinR polypeptide with a Chemerin polypeptide in the presence or absence of an antibody specific for said ChemerinR polypeptide; and

(b) measuring  $\text{Ca}^{2+}$  mobilization induced by said Chemerin polypeptide, wherein a decrease in said  $\text{Ca}^{2+}$  mobilization in the presence of said antibody, relative to said  $\text{Ca}^{2+}$  mobilization in the absence of said antibody, is indicative of said antibody inhibiting ChemerinR activation.

112. (Previously Added) The method of claim 111, wherein said ChemerinR polypeptide comprises a sequence of SEQ ID NO. 2, 4, or 6.

113. (Previously Added) The method of claim 111, wherein said antibody is a monoclonal antibody.

114. (Previously Added) A method of inhibiting ChemerinR activation, said method comprising:

(a) contacting a ChemerinR polypeptide with an antibody specific for said ChemerinR polypeptide;

(b) contacting said ChemerinR polypeptide from (a) with a Chemerin polypeptide; and

(c) measuring the binding of said ChemerinR polypeptide to said Chemerin polypeptide, wherein a decrease in said binding, relative to the binding to the same ChemerinR polypeptide without contacting said antibody, is indicative of said antibody inhibiting ChemerinR activation.

115. (Previously Added) The method of claim 114, wherein said ChemerinR polypeptide comprises a sequence of SEQ ID NO. 2, 4, or 6.

116. (Previously Added) The method of claim 114, wherein said antibody is a monoclonal antibody.

117. (Previously Added) A method of inhibiting ChemerinR activation, said method comprising:

(a) contacting a ChemerinR polypeptide with an antibody specific for said ChemerinR polypeptide;

(b) contacting said ChemerinR polypeptide from (a) with a Chemerin polypeptide; and

(c) measuring  $\text{Ca}^{2+}$  mobilization induced by said Chemerin polypeptide, wherein a decrease in said  $\text{Ca}^{2+}$  mobilization, relative to  $\text{Ca}^{2+}$  mobilization measured with the same ChemerinR polypeptide without contacting said antibody, is indicative of said antibody inhibiting ChemerinR activation.

118. (Previously Added) The method of claim 117, wherein said ChemerinR polypeptide comprises a sequence of SEQ ID NO. 2, 4, or 6.

119. (Previously Added) The method of claim 117, wherein said antibody is a monoclonal antibody.

120. (Currently Added) The antibody of claim 91, wherein said antibody blocks the activity of said ChemerinR polypeptide induced by a Chemerin polypeptide.

121. (Currently Added) The antibody of claim 120, wherein said antibody is a monoclonal antibody.

122. (Currently Added) The antibody of claim 121, wherein said monoclonal antibody is 4C7 monoclonal antibody.

123. (Currently Added) The antibody of claim 121, wherein said monoclonal antibody is 1H2 monoclonal antibody.